



7E7

TWIN DIODE—REMOTE-CUTOFF PENTODE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage. 6.3[□] ac or dc voltsCurrent. 0.3^{□□} ampDirect Interelectrode Capacitances:[○]

Pentode Unit:

Grid No.1 to Plate 0.005 max. μf

Input. 4.6 μf

Output 5.5 μf

Diode-No.1 Plate to Grid No.1 0.013 max. μf

Diode-No.2 Plate to Grid No.1 0.003 max. μf

[○] With external shield connected to cathode.

Mechanical:

Mounting Position. Any

Maximum Overall Length 2-25/32"

Maximum Seated Length. 2-1/4"

Maximum Diameter 1-3/16"

Bulb T-9

Base Lock-In 8 Pin

Basing Designation for BOTTOM VIEW 8AE

Pin 1—Heater

Pin 6—Pentode

Pin 2—Pentode

Grid No.1

Plate

Pin 7—Cathode,

Pin 3—Diode-No.2

Pentode

Plate

Grid No.3

Pin 4—Diode-No.1

Pin 8—Heater

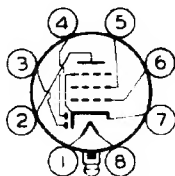
Plate

Plug—Base

Pin 5—Pentode

Shell

Grid No.2

PENTODE UNIT
AMPLIFIER—Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. 300 max. volts

GRID-No.2 (SCREEN) VOLTAGE 100 max. volts

GRID-No.2 SUPPLY VOLTAGE 300 max. volts

PLATE DISSIPATION. 2 max. watts

GRID-No.2 DISSIPATION. 0.3 max. watt

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Positive bias value 0 max. volts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. 90 max. volts

Heater positive with respect to cathode. 90 max. volts

(continued on next page)

[□] Nominal voltage = 7.0 volts.^{□□} Nominal current = 0.32 ampere.

←Indicates a change.

SEPT. 30, 1948

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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Typical Operation and Characteristics:

| | | | | |
|--|------|-------|-----|------------|
| Plate Voltage. | 100 | 250 | . . | volts |
| Grid-No.2 Voltage. | 100 | 100 | . . | volts |
| Cathode-Bias Resistor. | 80 | 330 | . . | ohms |
| Plate Resistance (Approx.) | 0.15 | 0.7 | . . | megohm |
| Transconductance | 1600 | 1300 | . . | μ mhos |
| Grid-No.1 Bias (Approx.) for transconductance of 2 μ mhos | -36 | -42.5 | . . | volts |
| Plate Current. | 10 | 7.5 | . . | ma |
| Grid-No.2 Current. | 2.7 | 1.6 | . . | ma |

DIODE UNITS - Two

Maximum Ratings, Design-Center Values:

| | | |
|--|--------|----|
| PLATE CURRENT (For Each Diode) | 1 max. | ma |
|--|--------|----|

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